

Annual Report

Production Sector

OMB Control No. 2060-0328
Expires 07/31/2011



Company Information

Company Name: **Occidental Oil and Gas Corporation**

Gas STAR Contact: **Krish Ravishankar**

Title **Worldwide Environmental Manager**

Address: **5 Greenway Plaza**

City: **Houston**

State: **TX**

Zip: **77046**

Phone: **(713) 366-5039**

Fax: **(713) 215-7575**

E-mail: **krish_ravishankar@oxy.com**

Company Information Updated: **No**

Activities Reported

BMP1: No BMP2: No BMP3: Yes

Total Methane Emission Reductions Reported This Year: **636,172**

Previous Years' Activities Reported: **No**

Period Covered by Report

From: **01/01/2009**

To: **12/31/2009**

☒ I hereby certify the accuracy of the data contained in this report.

Additional Comments

Annual Report

Production Sector

OMB Control No. 2060-0328
Expires 07/31/2011



BMP3: Partner Reported Opportunities (PROs)

Current Year Activities

A. Facility/location identifier information:

Elk Hills/California

B. Description of PRO

Please specify the technology or practice that was implemented:

DI&M: leak detection using lower emission threshold

Please describe how your company implemented this PRO:

A fugitive emission leak detection and repair program (LDAR) was implemented at the Elk Hills facilities in 1998.

C. Level of Implementation

Frequency of activity or practice: 4 times/year

D. Methane Emissions Reduction

Methane Emissions Reduction: **463,448 Mcf/year**

Basis for the emissions reduction estimate: **Other**

The initial fugitive emissions were calculated before the LDAR program was implemented using published emission factors and component counts. The LDAR program uses emission measurement to determine annual emissions. The methane reduction is calculated by subtracting annual measured fugitive emissions from the initial fugitive emission calculations before the LDAR program was implemented.

E. Are these emissions reductions a one-year reduction or a multi-year reduction?

☐ One-year

☐ Multi-year

If Multi-year:

Partner will report this activity once and let EPA automatically calculate future emission reductions based on sunset date duration.

Partner will report this activity annually up to allowed sunset date.

Annual Report

Production Sector

OMB Control No. 2060-0328
Expires 07/31/2011



F. Cost Summary

Estimated cost of implementing the PRO (including equipment and labor): \$ _____

G. Total Value of Gas Saved

Value of Gas Saved: \$ 2,317,240

\$ / Mcf used: \$ 5.00

H. Planned Future Activities

To what extent do you expect to implement this PRO next year?: **Elk Hills will continue to perform LDAR at its facilities.**

Previous Years' Activities

Year	Frequency of practice/activity or # of Installations	Total Cost * (\$)	Estimated Reductions (Mcf/Yr)	Value of Gas Saved (\$)

* Total cost of practice/activity (including equipment and labor)

Additional Comments

Annual Report

Production Sector

OMB Control No. 2060-0328
Expires 07/31/2011



BMP3: Partner Reported Opportunities (PROs)

Current Year Activities

A. Facility/location identifier information:

THUMS/California

B. Description of PRO

Please specify the technology or practice that was implemented:

DI&M: leak detection using lower emission threshold

Please describe how your company implemented this PRO:

A fugitive emission leak detection and repair program (LDAR) was implemented at the THUMS facilities in 2000

C. Level of Implementation

Frequency of activity or practice: 4 times/year

D. Methane Emissions Reduction

Methane Emissions Reduction: 13,841 Mcf/year

Basis for the emissions reduction estimate: Other

The initial fugitive emissions were calculated before the LDAR program was implemented using published emission factors and component counts. The LDAR program uses emission measurement to determine annual emissions. The methane reduction is calculated by subtracting the annual measured fugitive emissions from the initial fugitive emission calculations before the LDAR program was implemented.

E. Are these emissions reductions a one-year reduction or a multi-year reduction?

☐ One-year

☐ Multi-year

If Multi-year:

Partner will report this activity once and let EPA automatically calculate future emission reductions based on sunset date duration.

Partner will report this activity annually up to allowed sunset date.

Annual Report

Production Sector

OMB Control No. 2060-0328
Expires 07/31/2011



F. Cost Summary

Estimated cost of implementing the PRO (including equipment and labor): \$ _____

G. Total Value of Gas Saved

Value of Gas Saved: \$ **69,205**

\$ / Mcf used: \$ **5.00**

H. Planned Future Activities

To what extent do you expect to implement this PRO next year?: **THUMS will continue to perform LDAR at its facilities.**

Previous Years' Activities

Year	Frequency of practice/activity or # of Installations	Total Cost * (\$)	Estimated Reductions (Mcf/Yr)	Value of Gas Saved (\$)

* Total cost of practice/activity (including equipment and labor)

Additional Comments

Annual Report

Production Sector

OMB Control No. 2060-0328
Expires 07/31/2011



BMP3: Partner Reported Opportunities (PROs)

Current Year Activities

A. Facility/location identifier information:

Tidelands/California

B. Description of PRO

Please specify the technology or practice that was implemented:

DI&M: leak detection using lower emission threshold

Please describe how your company implemented this PRO:

A fugitive emission leak detection and repair program (LDAR) was implemented at the Tidelands facilities in 1997.

C. Level of Implementation

Frequency of activity or practice: 4 times/year

D. Methane Emissions Reduction

Methane Emissions Reduction: 7,874 Mcf/year

Basis for the emissions reduction estimate: Other

The initial fugitive emissions were calculated before the LDAR program was implemented using published emission factors and component counts. The LDAR program uses emission measurement to determine annual emissions. The methane reduction is calculated by subtracting the annual measured fugitive emissions from the initial fugitive emission calculations before the LDAR program was implemented.

E. Are these emissions reductions a one-year reduction or a multi-year reduction?

☐ One-year

☐ Multi-year

If Multi-year:

Partner will report this activity once and let EPA automatically calculate future emission reductions based on sunset date duration.

Partner will report this activity annually up to allowed sunset date.

Annual Report

Production Sector

OMB Control No. 2060-0328
Expires 07/31/2011



F. Cost Summary

Estimated cost of implementing the PRO (including equipment and labor): \$ _____

G. Total Value of Gas Saved

Value of Gas Saved: \$ 39,370

\$ / Mcf used: \$ 5.00

H. Planned Future Activities

To what extent do you expect to implement this PRO next year?: **Tidelands will continue to perform LDAR at its facilities.**

Previous Years' Activities

Year	Frequency of practice/activity or # of Installations	Total Cost * (\$)	Estimated Reductions (Mcf/Yr)	Value of Gas Saved (\$)

* Total cost of practice/activity (including equipment and labor)

Additional Comments

Annual Report

Production Sector

OMB Control No. 2060-0328
Expires 07/31/2011



BMP3: Partner Reported Opportunities (PROs)

Current Year Activities

A. Facility/location identifier information:

Midcontinent RMAT/Colorado

B. Description of PRO

Please specify the technology or practice that was implemented:

Perform reduced emissions completions

Please describe how your company implemented this PRO:

After a well is completed, temporary equipment including tanks are set on site to capture the reservoir fluids, cuttings, etc. the natural gas containing methane is then routed from the tanks to a gas sales line instead of venting to the atmosphere.

C. Level of Implementation

Number of units installed: 20 units

D. Methane Emissions Reduction

Methane Emissions Reduction: 151,009 Mcf/year

Basis for the emissions reduction estimate: Actual field measurement

E. Are these emissions reductions a one-year reduction or a multi-year reduction?

☐ One-year

☐ Multi-year

If Multi-year:

Partner will report this activity once and let EPA automatically calculate future emission reductions based on sunset date duration.

Partner will report this activity annually up to allowed sunset date.

Annual Report

Production Sector

OMB Control No. 2060-0328
Expires 07/31/2011



F. Cost Summary

Estimated cost of implementing the PRO (including equipment and labor): \$ _____

G. Total Value of Gas Saved

Value of Gas Saved: \$ 755,045

\$ / Mcf used: \$ 5.00

H. Planned Future Activities

To what extent do you expect to implement this PRO next year?: _____

Previous Years' Activities

Year	Frequency of practice/activity or # of Installations	Total Cost * (\$)	Estimated Reductions (Mcf/Yr)	Value of Gas Saved (\$)

* Total cost of practice/activity (including equipment and labor)

Additional Comments

Annual Report

Production Sector

OMB Control No. 2060-0328
Expires 07/31/2011



Additional Accomplishments